
Hardware replacement guidelines

Precautions

To avoid personal injury and equipment damage, review the following guidelines before handling Meridian 1 equipment.

Power equipment

There are no user-repairable components in the power system. If a power supply fails, the complete unit must be replaced. Do *not* disassemble a power supply under any circumstances.

WARNING

To avoid the danger of electric shock, be very careful when you work with power equipment and connections. Warning notices are displayed and *must* be heeded.

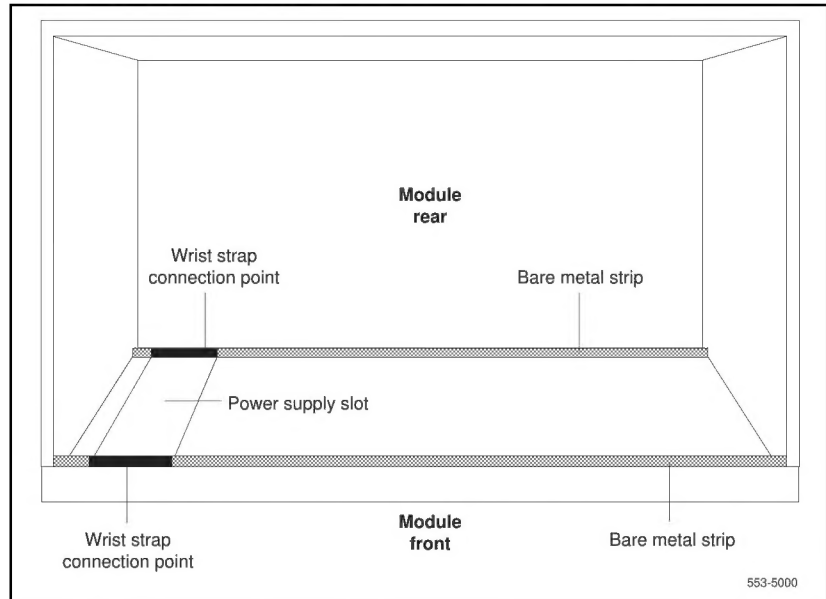
Circuit cards

Handle cards as follows:

- Unpack or handle cards away from electric motors, transformers, or similar machinery.
- Handle cards by the edges only. Do not touch the contacts or components.
- Set cards on a protective antistatic bag. If an antistatic bag is not available, hand-hold the card, or set it in a card cage unseated from the connectors.
- Store cards in protective packing. Do not stack cards on top of each other unless they are packaged.

To avoid card damage from static discharge, wear a properly connected antistatic wrist strap when you work on Meridian 1 equipment. If a wrist strap is not available, regularly touch one of the bare metal strips in a module to discharge static. [Figure 1](#) shows the recommended connection points for the wrist strap and the bare metal strips you should touch.

Figure 1
Static discharge points



During replacement procedures:

- Turn off the circuit breaker or switch for a module power supply before the power supply is removed or inserted.

Note: In AC-powered systems, capacitors in the power supply must discharge. Wait five full minutes between turning off the circuit breaker and removing the power supply from the module.

- Software disable cards, if applicable, before they are removed or inserted.
- Hardware disable cards, whenever there is an enable/disable switch, before they are removed or inserted.
- Return defective or heavily contaminated cards to a repair center. Do not try to repair or clean them.

Data disks

Follow the precautions below to avoid damaging disks:

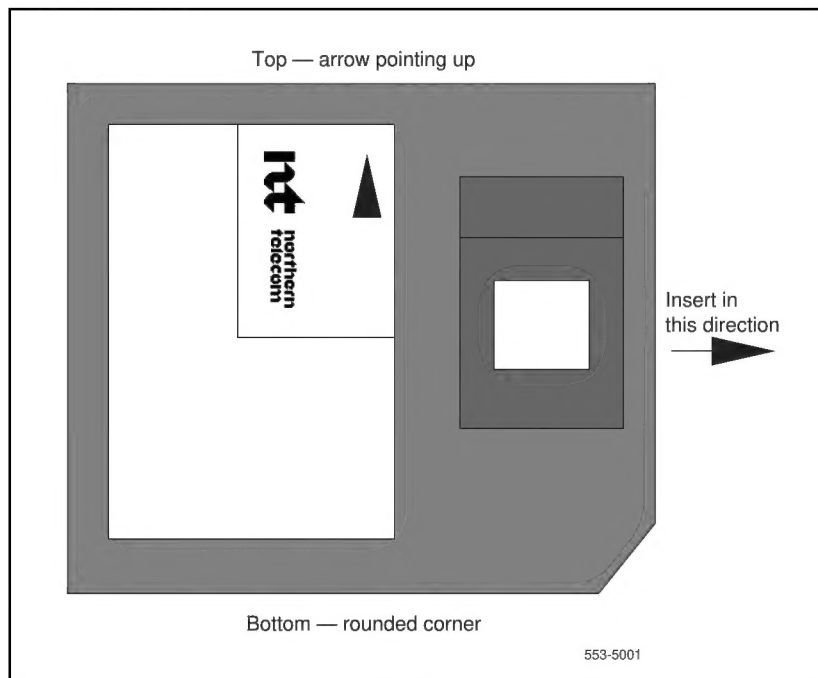
- Handle only the hard surface; never touch the recording surface.
- Keep disks away from strong magnetic fields.
- Avoid exposing disks to extreme heat, rapid changes in temperature, or high humidity.
- Store disks in a suitable container.

To install a disk, make sure the arrow on the label is pointing up and the rounded corner is on the bottom on the right-hand side (see [Figure 2](#)).

CAUTION

The disk drive can be damaged if an upside-down disk is forced into the slot. If there is significant resistance when you try to insert a disk, remove the disk and check the position.

Figure 2
Disk position



Options 51C, 61C, 81, and 81C cable guidelines

To disconnect a cable from the Core or Core/Network Module backplane, use the P0741489 Extraction Tool provided in the rear of the module (behind the I/O safety panel).

CAUTION

You must use the P0741489 Extraction Tool to disconnect cables from the backplane shrouds in NT6D60 Core, NT9D11 and NT5D21 Core/Network Modules.

Follow the procedure below to avoid bending or breaking pins when removing cable connectors from the backplane shrouds. Do not insert the extraction tool unless the cable connector is locked into the shroud. Do not force the extraction tool deeper than the detent on the cable connector.

- 1 Grasp the cable connector by the strain relief tab.
- 2 Center the longer flat edge on the angled end of the tool between the cable connector and the wall of the shroud on the right side of the cable connector.

Note: If the straight end of the tool is notched, use that end if the connector can be accessed straight-on. If you must angle the tool at all, use the angled end.
- 3 *Gently* insert the extraction tool and gradually apply pressure while gently rocking the cable connector up and down.
- 4 Stop applying pressure as soon as the detent of the cable connector comes loose from the shroud.
- 5 Slowly remove the extraction tool and the cable connector.

Before you connect cables to the backplane, visually inspect the backplane shroud connectors to make sure there are no bent pins. To connect cables:

- 1** Orient the cable connector so the strain relief paddle is to the right.
- 2** Partially insert the cable connector so its guides mate to the corresponding backplane connector.
- 3** Apply a small amount of pressure to push the cable connector straight into the backplane connector. You will feel a detent click when the connector seats.

CAUTION

Pins may be bent or broken if you try to insert the cable connector at an angle. Do not push the connector in any further after you hear the detent click.